

**ABSTRACT**

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A three-dimensional image of a semiconductor device identification pattern is obtained by measuring the distance of at least one sensor to the surface of the semiconductor device. The apparatus includes a source of radiation for deriving the distance from properties of the reflected light. A <sup>unit</sup> means for determining the distance and an image processing unit are used to establish the three-dimensional picture. Positional information can be achieved in a scanning movement from motors being controlled by a control unit. By applying a threshold value, a two-dimensional image is derived and by a pattern recognition algorithm, the identification pattern can be analyzed.